

**FIG. 1**

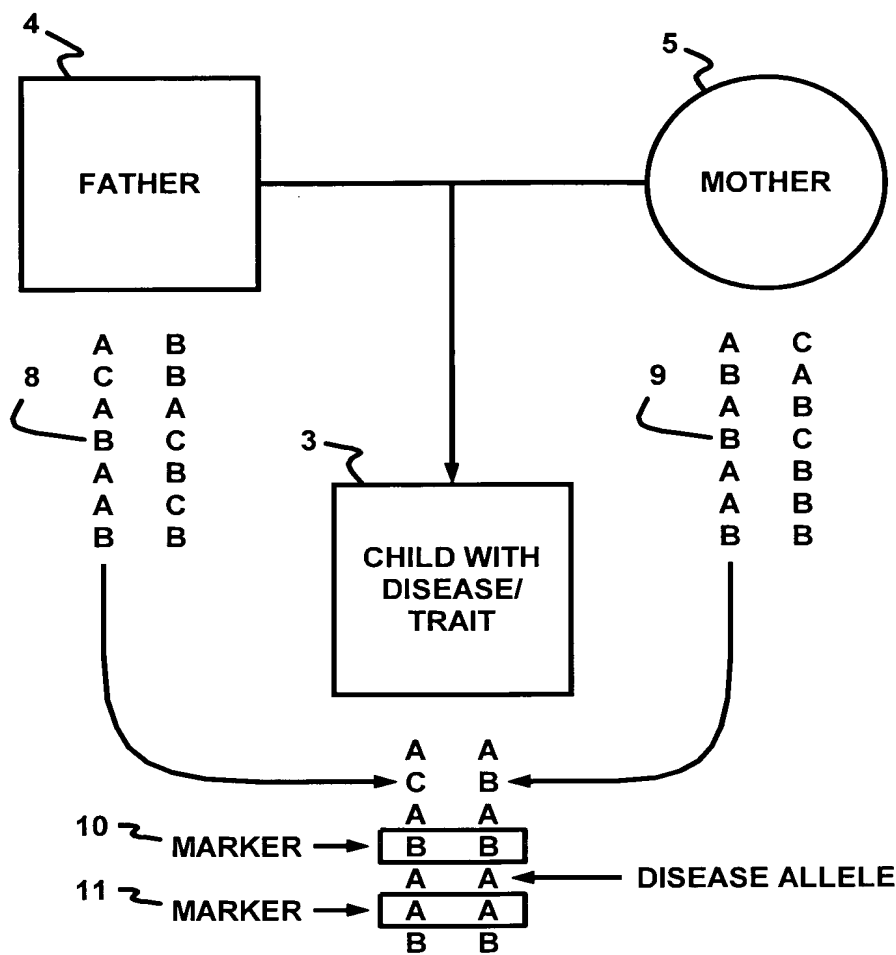
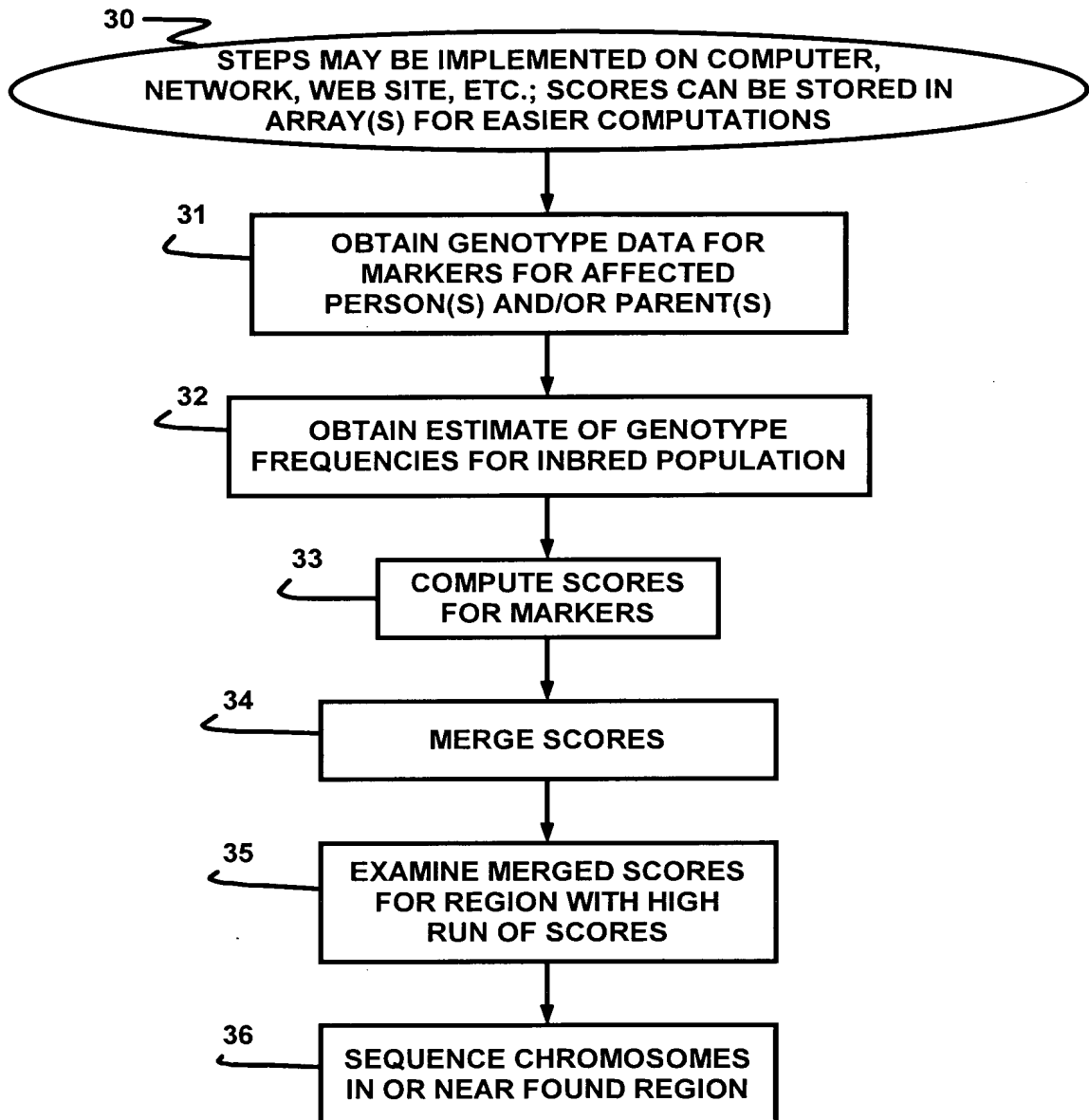


FIG. 2



**FIG. 3**

Observed	Assumption for Affected Person			Null Hypothesis
	Autozygous A	Autozygous B	Autozygous C	Not Autozygous
Affected AA	$(1-e) + ep_A^2$	$ep_A^2$	$ep_A^2$	$(1-e)p_A^F p_A^M + ep_A^2$
Affected AB	$2ep_A p_B$	$2ep_A p_B$	$2ep_A p_B$	$(1-e)(p_A^F p_B^M + p_B^F p_A^M) + 2ep_A p_B$
Parent AA	$(1-e)p_A/(2-p_A) + ep_A^2$	$ep_A^2$	$ep_A^2$	$p_A^2$
Parent AB	$(1-e)2p_B/(2-p_A) + 2ep_A p_B$	$(1-e)2p_A/(2-p_B) + 2ep_A p_B$	$2ep_A p_B$	$2p_A p_B$

FIG. 4

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MARKER 1	AFFECTED PERSON 1	MOTHER OF PERSON 1	FATHER OF PERSON 1	AFFECTED PERSON 2	
41	PROBABILITY AUTOZYGOUS A	PROBABILITY AUTOZYGOUS A	PROBABILITY AUTOZYGOUS A	PROBABILITY AUTOZYGOUS A	
42	PROBABILITY AUTOZYGOUS B	PROBABILITY AUTOZYGOUS B	PROBABILITY AUTOZYGOUS B	PROBABILITY AUTOZYGOUS B	...
43	PROBABILITY AUTOZYGOUS C	PROBABILITY AUTOZYGOUS C	PROBABILITY AUTOZYGOUS C	PROBABILITY AUTOZYGOUS C	
44	PROBABILITY NOT AUTOZYGOUS	PROBABILITY NOT AUTOZYGOUS	PROBABILITY NOT AUTOZYGOUS	PROBABILITY NOT AUTOZYGOUS	

MARKER 2	AFFECTED PERSON 1	MOTHER OF PERSON 1	FATHER OF PERSON 1	AFFECTED PERSON 2	
	PROBABILITY AUTOZYGOUS A	PROBABILITY AUTOZYGOUS A	PROBABILITY AUTOZYGOUS A	PROBABILITY AUTOZYGOUS A	
	PROBABILITY AUTOZYGOUS B	PROBABILITY AUTOZYGOUS B	PROBABILITY AUTOZYGOUS B	PROBABILITY AUTOZYGOUS B	...
	PROBABILITY AUTOZYGOUS C	PROBABILITY AUTOZYGOUS C	PROBABILITY AUTOZYGOUS C	PROBABILITY AUTOZYGOUS C	
	PROBABILITY NOT AUTOZYGOUS	PROBABILITY NOT AUTOZYGOUS	PROBABILITY NOT AUTOZYGOUS	PROBABILITY NOT AUTOZYGOUS	

MARKER 3	AFFECTED PERSON 1	MOTHER OF PERSON 1	FATHER OF PERSON 1	AFFECTED PERSON 2	
	PROBABILITY AUTOZYGOUS A	PROBABILITY AUTOZYGOUS A	PROBABILITY AUTOZYGOUS A	PROBABILITY AUTOZYGOUS A	
	PROBABILITY AUTOZYGOUS B	PROBABILITY AUTOZYGOUS B	PROBABILITY AUTOZYGOUS B	PROBABILITY AUTOZYGOUS B	...
	PROBABILITY AUTOZYGOUS C	PROBABILITY AUTOZYGOUS C	PROBABILITY AUTOZYGOUS C	PROBABILITY AUTOZYGOUS C	
	PROBABILITY NOT AUTOZYGOUS	PROBABILITY NOT AUTOZYGOUS	PROBABILITY NOT AUTOZYGOUS	PROBABILITY NOT AUTOZYGOUS	

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FIG. 5

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